

CLAIMS

1. A quantum dot-dispersed light emitting device comprising:
 - a substrate;
 - an electron injection electrode;
 - a hole injection electrode; and
 - an inorganic light emitting layer disposed so as to be in contact with both the electrodes,
 - wherein the inorganic light emitting layer includes an ambipolar inorganic semiconductor material and nanocrystals dispersed as luminescent centers in the ambipolar inorganic semiconductor material, and
 - is configured without having, at the interface with the electron injection electrode and/or the hole injection electrode, epitaxial relation therewith.
2. The quantum dot-dispersed light emitting device according to claim 1,
 - wherein the ambipolar inorganic semiconductor material is an amorphous semiconductor phase.
3. The quantum dot-dispersed light emitting device according to claim 1,
 - wherein the ambipolar inorganic semiconductor material is a polycrystal semiconductor phase.
4. The quantum dot-dispersed light emitting device according to any of claims 1 to 3,
 - wherein the inorganic light emitting layer comprises a ZnS type

semiconductor phase.

5. The quantum dot-dispersed light emitting device according to claim 4,

wherein the inorganic light emitting layer comprises $Zn_pM_{1-p}S_xSe_yTe_{1-x-y}$ (where $0 \leq x, y, x + y \leq 1$, $0 < p \leq 1$, M: alkaline-earth metal, Cd).

6. The quantum dot-dispersed light emitting device according to claim 4 or 5,

wherein the nanocrystals contain any of InP, GaAs, and GaP as a main component.

7. The quantum dot-dispersed light emitting device according to any of claims 1 to 3,

wherein the hole injection electrode comprises Cu-doped $Zn_pM_{1-p}S_xSe_yTe_{1-x-y}$ (where $0 \leq x, y, x + y \leq 1$, $0 < p \leq 1$, M: alkaline-earth metal, Cd).

8. The quantum dot-dispersed light emitting device according to any of claims 1 to 3,

wherein the substrate is a glass substrate.

9. The quantum dot-dispersed light emitting device according to any of claims 1 to 3,

wherein the electron injection electrode and the hole injection electrode are disposed spaced apart from each other, with the inorganic light emitting layer interposed therebetween, in a lamination on the substrate.

10. The quantum dot-dispersed light emitting device according

to any of claims 1 to 3,

wherein the electron injection electrode and the hole injection electrode are disposed spaced apart from each other in a plane on the substrate.

11. The quantum dot-dispersed light emitting device according to any of claims 1 to 3,

wherein a gate electrode is disposed between the electron injection electrode and the hole injection electrode.

12. A display apparatus comprising the quantum dot-dispersed light emitting device according to any of claims 1 to 3.

13. An illumination device comprising the quantum dot-dispersed light emitting device according to any of claims 1 to 3.